

AMENDMENT TO THE SPECIFICATION

Page 1, under "Field of Invention", please amend the paragraph as follows:

This invention relates to a casting device for directly forming or casing prosthesis sockets on residual limbs. More particularly, the invention relates to a casting device that may be placed directly on a residuum to pressurize a moldable and settable prosthesis socket material previously applied over the residuum to thereby produce a socket ~~a~~ of finished internal volume.

Page 3, please amend paragraph five as follows:

The bladder preferably includes an outer fabric covering, for example, an elasticized fabric, that controls or prevents outward distention of the outer wall of the bladder when the expandable chambers are pressurized. This ensures that the force of the expandable chambers is directed inwardly toward the casting area and not outwardly away from the casting area.

Page 6, please amend the first full paragraph as follows:

Connected to a forward side of the base member 12 is a flexible, expandable annular pressure bladder 34 defining a generally conical, central casting area 32 and extendable axially forward from the base member 12 over a length of the bladder 34. The bladder 34 is configured and dimensioned to extend generally along the length of a residuum covered by a suction socket on which the prosthesis socket material is to be molded. The bladder 34 preferably includes an outer wall 36 that may be formed of a silicone rubber material reinforced with a web or strands of relatively non-stretchable material or a material that limits extension outwardly of the wall 36 or may be formed of an elastomer material such as silicone elastomer with a separate outer covering of material that limits or prevents outward distension of the outer wall 36.

Page 6, please amend the second full paragraph as follows:

An inner wall 38 of the bladder 34 defining the casting area 32 may be formed of one or more sheets of pliable and compliant sheet material that also may be reinforced with elements that permit tailoring the extensibility of the material according to predetermined criteria. In accordance with the preferred embodiment, the inner wall 38 and outer wall 36 comprises substantially thin, flexible material that permits the bladder 34 to be rolled on and off the residual limb in a similar fashion to the bladder disclosed in U.S. Patent No. 5,885,509 to permit easy donning and doffing of the bladder 34 over the residual limb. A preferred characteristic of the inner wall 38 of the bladder 34 is that it is formed of a material that will not itself distend substantially when tensioned, yet will be fully compliant when the chamber behind it expands to envelop a residual limb and prosthesis socket molding material that are located within the casting area 32.

Page 9, after paragraph two, please insert the following paragraph:

As illustrated in Figs. 5A – 5D, the outer wall 36 generally retains its shape both before and after the chambers 40, 42 and 44 are pressurized. This is due to the outer wall 36 as being formed of a material that limits or prevents outward distension thereof when the chambers are pressurized.

Page 9, please amend paragraph six as follows:

Figs. 6A-6C illustrate an alternate embodiment of the invention wherein a bladder 34' having proximal and distal ends 35', 37' is generally cylindrical in cross-section and includes an outer wall 36' and an inner wall 38' defining multiple expandable inner chambers 54 and an annular outer chamber 56, extending over the inner chambers 54 as seen in Fig. 6C. An additional intermediate annular wall 39 spaced inwardly from the outer wall 36' and outwardly of inner wall 38' defines the

outer chamber 56 which in this embodiment is similar to the annular pressure chamber described in Patent No. 5,885,509. The side walls 38' and 39 are relatively pliable and compliant to enable the bladder 34' to be easily rolled on or rolled off a residuum and a prosthesis casting material located on the distal end of the residuum so that the casting material may be located within the generally conical casting area 32' defining by the side walls 39. The distension characteristics of intermediate wall 39 are selected to distribute desired casting pressure on the residuum and to distribute pressure loading behind the expandable chambers 54. The outer wall 36' also could be provided with a covering or otherwise be constructed so that its distention under internal pressure in the chambers 54, 56 is limited.

Page 10, please amend the second full paragraph as follows:

Fig. 7 illustrates the embodiment of the casting device illustrated in Figs. 1 and 2 in relation to a residuum 66, a suction socket 62, a molded prosthesis socket S 5 and a locking pin 28 extended from the suction socket 62 through the distal end of the socket S 5. Fig. 7 depicts the relationship of the depicted elements upon removal of the casting device 10 from the prosthesis socket S 5 after completion of the casting of the socket S 5 and after at least partial curing and hardening of the socket S 5.

Page 10, please amend the third full paragraph as follows:

In a manner known in the art, the socket S 5 is then removed from the suction socket 62 for final finishing and the suction sleeve 62 is removed from the residuum 66. The locking pin 28, of course, may be removed any time by unthreading it from the distal end of the suction sleeve 62.